#### Headquarters U.S. Air Force

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# Managing Risk from Unregulated Requirements



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**U.S. AIR FORCE** 



# Restoration Program Challenge of Unregulated Contaminants

- What is the Proper Response When New Cleanup Standards Are Proposed, or New Risk Assessment Data Becomes Available?
  - EXAMPLE: Perchlorate
    - Currently Unregulated
    - Tremendous Pressure to Sample and Begin Cleanup to 1 ppb due to EPA Draft Health Risk Assessment
  - **EXAMPLE:** Trichloroethylene
    - Current Drinking Water Limit is 5ppb
    - Tremendous Pressure to Lower Cleanup Standards (1 ppb or even ND)
- In Both Cases, DoD Disagrees with EPA's Analysis and Process
- SAF/IEE and OSD-ATL Working with Administration to Resolve
  - Interagency Engagement Superintended by EOP
  - Development of "Unregulated Contaminant" Policy





# Effective Risk Management to Protect Human Health and the Environment



## Concerns du jour

- Perchlorate
- **■TCE**
- RDX
- Source Zone Removal

■ Watching: 1,4-Dioxane, PCE, HMX, ??





# Credible Risk Analysis+ Credible Cost / Benefit AnalysisEffective Risk Management

EPA Health Risk Assessment → IRIS
 + SDWA MCL Standard Setting Process
 MCL → Cleanup ARAR, RCRA, SDWA, etc.



#### Less Than Ideal Model

Credible Risk Analysis
 + Credible Cost Benefit Analysis
 Effective Risk Management

#### **DRAFT EPA Health Risk Assessment**

+ SDWA MCL Standard Setting Process
MCL → Cleanup ARAR, RCRA, SDWA, etc.

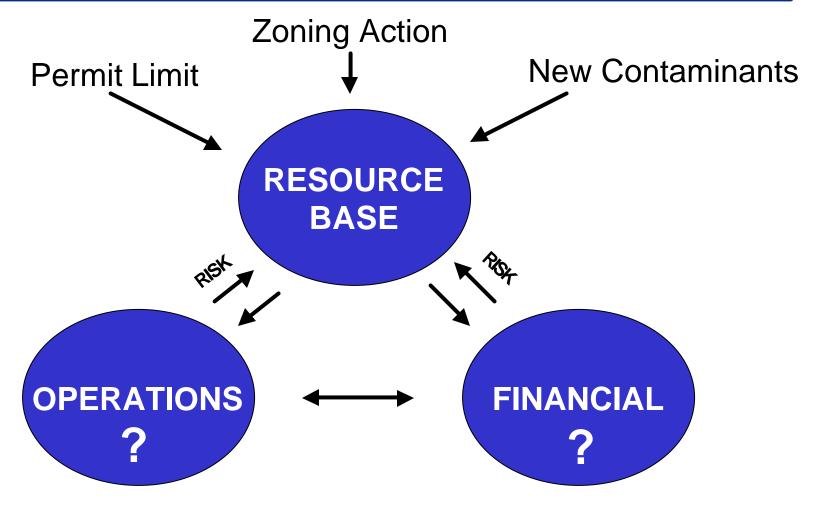


### Why Would This Happen

- Frustration with Bureaucracy
- Political
- Perception of Serving Public Interest
- Below EO 12866 Screening Level of \$100M



#### Impact Model





# Perchlorate Case Study



## Risk Management Concerns

■ 1999 EPA Guidance (reaffirmed in 22 Jan EPA Itr to Regions)

■2002 Draft Health Risk Assessment

■ EPA (ORD & NCEA) Interactions with regulatory communities, public, media



#### **Operational Risks**

- Supply chain of ordnance & propulsion systems for DoD / NASA / NMD are vulnerable to a SINGLE POINT FAILURE
- Loss of training resources (i.e. losing access to ranges / munitions areas via SDWA, CWA, RCRA & other injunctive statutory instruments)
- Degradation of weapons / propulsion / missile defense systems
- Loss of support resources (potable water, access to surface/subsurface)



#### Financial Risks

- RDT&E to re-tool weapons / propulsion / missile defense systems with alternative energetic compounds
- Environmental Liability / Cleanup costs
  - Increasing unit cost of weapons / propulsion / missile defense systems from Defense Industry (charged back via G&A or settlements)
  - Direct costs to DoD environmental TOA



#### Non-DoD Risk Examples

Loss of Community Water Supply Resources

 Diversion of Scarce Environmental Management Resources from Other Priorities

Impediment to Unrestricted Land Use and Development



#### What Can/Should Be Done

- GE vs. EPA, 2002
- Interagency Review and Resolution EO 12866
  - IPSC
  - Senior Leadership Negotiations
  - **EOP via Council on Environmental Quality** 
    - Process OMB
    - Science OSTP
  - ECOS
- DoD Policy to Address Broad Issues



#### **Basic Premise**

- Overstated Risk leads to Op risk + Financial Risk
- Commander or RPM is in difficult situation when asked to respond to non-statutory requirements
  - Legal
  - Fiscal
  - Ethical
  - Community Relations
- Attention to this has not been sufficient to defend AF Position and quantify costs / benefits
- So: increased cost accounting, decision authority (supported by special peer review) at higher level
- "Must-Fund" program not flexible enough, but must maintain discipline somehow



### New Policy Elements

- Decision-making Authority
- Cost Accounting
- **■**Technical Support



# **Proposed Policy**

- In most cases (restoration activities above MCL), no change
- But, when requests arise for cleanup or significant response more stringent than promulgated standards (may need "hot list"):
  - Installation must request Regulatory Agency to provide Explanation of Significant Differences
  - Reviewed by special panel (legal, fiscal, technical)
  - Panel Recommendation to MAJCOM/CV or appropriate ROD signatory authority for decision
- Decision filed with SAF/IE
- Extra Cost Accounting Steps

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#### Thank You!



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